

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF MAY 18, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on May 18, 1926, in the American Museum of Natural History; President Frank E. Lutz in the chair with seventeen members and eight visitors present.

Mr. George B. Wilmott, 1138 E. 37th Street, Brooklyn, and Mr. William M. Savin, 52 Broadway, New York City, were elected members of the Society.

Mr. Angell spoke on "Early Spring Collecting Experiences in North Carolina," illustrated by specimens of the insects he had found between April 9 and 26. His intention had been to visit Roanoke Island but, being deterred by local reports of the bad weather there, he had collected in the vicinity of Elizabeth City, where especially on the Weeksville Road and on the drift-covered banks of the estuary called Pasquotank River, he had found an abundance of beetles. Four days were spent at Washington, N. C., at the head of the Pamlico River in Beaufort County, where, under the bark of dead oaks, beetles were even more abundant. The beetles exhibited were largely Carabidæ, including *Pasimachus*, *Carabus* and a small series of *Loxandrus*.

Mr. Angell dwelt somewhat upon the meager hotel accommodations at Elizabeth City, the prospects of even worse at Manteo, six hours sail across the Albemarle Sound, and the hospitality of Mr. F. W. Hollowell, whose colonial mansion he was fortunately able to visit.

Mr. Davis spoke of the late Capt. Wainwright, formerly of Staten Island and later of Elizabeth City, whose extensive collections are unfortunately not at present available.

Mr. Huntingdon spoke of *Papilio ajax* and *troilus* smaller than the usual sizes.

Mr. Chapin referred to a newspaper article in which the gathering of 7,760 tent caterpillars by one young person was described.

Mr. Ragot described an Ailanthus tree on Staten Island from which he had taken 225 Cynthia cocoons, twenty-five in one bunch, which he exhibited. He also spoke of collecting in a meadow near Corona, Long Island, where thirty species of beetles were found in a few hours. Among them was a *Calosoma calidum* which devoured seven cut-worms.

Mr. Weiss spoke of having arranged to provide nineteen fire wardens with nets and cyanide jars with a view to obtaining some information on the insects flying at the height of their stations.

Mr. Davis exhibited a female *Schistocera americana* Drury taken on Todt Hill, Staten Island, May 8, 1926. He stated that this large grasshopper was not known to breed as far north as Staten Island, but flies up along the coast. Since 1882 he had recorded the insect on Staten Island on fifteen occasions usually in the fall months, the dates being from September 18 to December 28. On but three other occasions has it been recorded from the Island as early as the month of July.

Mr. Sherman spoke of the extraordinary accumulation of books and pamphlets by a Mr. Burger, of Brooklyn, which were piled up in a garage four feet high.

Mr. Nicolay spoke of finding *Elaphrus clairvillei* at Orangeburg on a muddy bank; also of a trip from Barnegat to New Lisbon, in the course of which *Rhinomacer pallipennis* was found on the flowers of pine.

Messrs. Shoemaker, Shannon, Bell, and Anderson also spoke briefly of the cold April having retarded the appearance of certain butterflies. No record for *Anosia plexippus*, for instance, was forthcoming.

MEETING OF OCTOBER 5, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on October 5, 1926, in the American Museum of Natural History; President Frank E. Lutz in the chair with twenty-four members and eight visitors, including C. L. Pollard and Herbert Barber.

Dr. Lutz and Mr. Sherman reported that the Woodruff collection and part of the books were in the museum; that all the books had been appraised, and that the balance of them would soon be shipped to the museum.

Mr. Davis announced the death on October 4, 1926, in her 89th year, of Mrs. Annie Trumbull Slosson, one of the founders of the Society and its steadfast friend for the thirty-four years of its existence. Mr. Davis was requested to prepare an obituary with portrait for the JOURNAL and the secretary was instructed to write Dr. and Mrs. B. B. Gallaudet, Hotel Irving, her surviving relatives, an expression of the Society's appreciation of her service to Entomology and regret for her death.

The President called for reports on summer collecting. Mr. Charles Louis Pollard, present as a visitor, spoke of his observations on a colony of wasps, *Chlorion ichneumonea*, which invariably provisioned its nest with green grasshoppers, *Orchelimum* and *Conocephalus*. His observations were corroborated by Mr. Davis.

Mr. Herbert S. Barber, of the U. S. National Museum, exhibited a specimen of *Dorcus nanus* Csy., ♂ taken at Cape Henry, Va., September 4, by Mr. George P. Engelhardt; and of *Nanosella fungi*, perhaps the smallest of beetles which, in the larval and adult stage, feeds in the vertical spore tubes of polyporus fungi.

Mr. Sherman described his summer visits to Ithaca, Quebec, Truro, Halifax, St. John, and Boston, always with the entomological libraries as his principal object.

Mr. Hall had visited the mountains of Wyoming again and had found August 18 too late at the altitude of 7,000 feet for successful collecting.

Messrs. Barber, Bell, Schwarz and Watson had found collecting poor, though a comparative abundance of *cardui* and *interrogationis* was reported by Mr. Watson.

Mr. Herbert Johnson had had some experience with gypsy moth at Woods Hole and with the preying mantis near Aberdeen, Md. He questioned the value of the mantis as a caterpillar hunter, its principal food being, in his experience, grasshoppers.

Messrs. Sheridan, Campbell, Mutchler, Dr. and Mrs. Hussey, spoke briefly.

Mr. H. F. Schwarz, whose summer had been spent at Fire Island, gave an interesting account of the wasps building in its sands, often abandoning a half-finished attempt, until the sand seemed, with its numerous punctures, like a pin cushion.

Dr. Melander had spent the summer getting acquainted with some eastern collecting grounds, Washington, D. C., and Woods Hole especially. Notwithstanding the capture of some 3,000 specimens he found the collecting not as rich as in Washington state.

Mr. Huntingdon had been very successful early in July in finding *Chrysaphanus epicranthe* in one corner of a cranberry bog at Lakehurst. In August he had visited a ranch in southeastern Wyoming and with E. J. Oslar in Denver. He described Mr. Oslar as a little Englishman 5 feet 4 or 5 inches tall, 69 years old, but slim, wiry and possessed of a great collection and eleven children.

Mr. Shoemaker's report, as usual, showed great activity. Greenwood Lake in June with Mr. Nicolay, *Canadensis* in the Pocono Mts. in July and September, with the big sweep net working the right hand side of the wood road going, the left side returning, while the thirty-seven bait bottles and the sugared trees were doing their part. One thousand beetles, selected for their special interest, rewarded these efforts; ninety-seven moths in one night, after killing off the common ones, helped to make what Mr. Shoemaker called a pretty good season. Noteworthy captures were seven *Limenitis ursula albofasciata*, all males, and the dark form of *Catocala relictata*. An interesting episode was a convention of katydids on September 20.

Mr. Nicolay, too, reported a successful summer with visits to Lake Surprise, Greenwood Lake, where many buprestids were beaten from scrub pine, to Long Beach, to Point Pleasant and to Fairfax County, Va. *Ardistomis obliquus*, *Cychrus shoemakeri*, *Pasimachus sublevis*, and other interesting beetles were mingled in Mr. Nicolay's report with fish hawks and a widow in bathing costume.

Mr. Olsen gave a thrilling account of his Bahama experience in the hurricane of July 25, and of his visit to Woods Hole where he again found a bruchid on Scotch Broom. He had also received an interesting South American collection of jassids, etc., from Dr. Bequaert, on which he will report later.

Mr. Chapin described, among other summer experiences, the effect of wasp sting on a katydid, the latter showing life for three weeks after being stung.

Mr. Willmott spoke of his entomological microscopic slides which he will exhibit later in the season.

Mr. Hartzell spoke of the occurrence of the oriental peach moth *Laspeyresia molesta* in Yonkers, N. Y., and exhibited specimens of *Autoserica japonica* which were taken in that vicinity during the summer. He also reported the presence of a recently introduced gall-forming mite *Eriophyes eucricotes* on *Lycium chinensis*.

Mr. Wm. T. Davis exhibited specimens, including two living males, of the grasshopper *Melanoplus differentialis* Thomas, from near Old Place, Staten Island, the only known locality for the species in the State of New York, first reported in this JOURNAL for December, 1924, and also mentioned in the *Bulletin of the Brooklyn Entomological Society*, December, 1925. He stated that he had lately visited the colony several times, and on the 30th of September, in the company of Dr. Frank L. Campbell, of New York University, and two of his students. It is interesting that the grasshoppers occupy a rather definite zone in the southwesterly side of the high embankment of the railroad. They extend a little way up its side, but are not very often found on top of the highest parts of the embankment, and they very seldom occur out on the adjacent salt meadow. In one place they are somewhat abundant in a thick tangle of matrimony vines. The allied *Melanoplus bivittatus* is much more generally distributed in the vicinity. The specimens of *differentialis* from Staten Island are much darker in color than those from the western part of its range in Colorado, Texas, etc.

Mr. Davis also stated that among butterflies *Melitæa phæton* Drury had been more plentiful on Staten Island during June than he had known it before; *Pyrameis cardui* was also common, while the Monarch butterfly was comparatively scarce. A few were seen flying southward along the shore of the Island on the 30th of August.

MEETING OF OCTOBER 19, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on October 19, 1926, in the American Museum of Natural History; Vice-President Henry Bird in the chair, with twenty members and three visitors present.

A letter from Dr. Stephen Breuning, Vienna, soliciting exchanges, was read.

Dr. Frank L. Campbell, New York University, was elected a member of the Society.

On motion by Mr. Mutchler, the meeting scheduled for November 2, being Election Day, was suspended.

Mr. Bell spoke of "Collecting in North Carolina and Virginia," being a narrative of a successful attempt to find the Hesperid butterfly *Problemata bulenta* near Wilmington, N. C., and *Amblyscirtes carolina* in the Dismal Swamp near Suffolk, Va. *Bulenta* was found beside a road running through swamps and old rice fields across the Cape Fear River from Wilmington in July. Other localities, including the beach at the mouth of the river, were visited but the fourteen specimens of *Bulenta* seen were along the road mentioned. Specimens were shown of this species, also of *Problemata byssus*, *Poanes yehl*, *Amblyscirtes carolina* and *Ephiphyes carolina*.

Mr. Angell spoke of his summer visits to Cook's Falls and Livingston Manor, where *Cicindela purpurea* was abundant on a steep hillside and a small red Staphylinid was found under poplar bark with ants; also of visits to Connecticut and Pine Island, N. Y.

Mr. Davis spoke of his visits to Wilmington, N. C., with Mr. Barber and the pleasant recollections that remained with him. He exhibited *Erebus odora* found August 12 at Tottenville, Staten Island, following the West Indian hurricane which he believed had blown the moth north. He spoke of three previous occurrences on Staten Island and of other northern records. Mr. Davis also described certain artificial fumaroles on Staten Island, resulting from slow combustion of material used to fill in a railroad embankment, and the effect of their warmth on insect life. The grasshopper *Dissosteira carolina* matured June 8, twelve days early, and the southern cockroach *Periplaneta americana* was enabled to survive outdoors.

Mr. Frank Johnson exhibited some remarkable Lepidoptera, including saturnid moths and a specimen of *Morpho*, intermediate between described forms.

Mr. Lemmer spoke of his summer visits to Lakehurst where rain had often interfered with collecting, though it had not damaged the Japanese beetle which was abundant, as were katydids. Two insects were noteworthy, viz., *Citheronia sepulchralis*, four, and *Catocala herodias*, two, all taken at light.

Mr. Swift also spoke of the Japanese beetle, its habit of going into the ground at night and its spread during the year. Mr. Bird stated that the quarantine boundary now extended to Ossining on the Hudson River and to Stamford, Conn.

Mr. Ragot exhibited the work of a caterpillar in eating linen cloth and forming its cocoon in part of its threads.

Mr. Bird described a journey to the Delaware-Maryland peninsula where box huckleberry and *Azalea atlantica* occur. *Papaipema* was sought vainly in *Helonias bullata*. At Riverhead, however, the larvæ of a noctuid moth, *Schinia* sp., was found feeding on seeds of aster.

MEETING OF NOVEMBER 16, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on November 16, 1926, in the American Museum of Natural His-

tory; President Frank E. Lutz in the chair, with twenty members and nine visitors present.

The Program Committee reported Dr. Campbell and Mr. Watson as speakers for meeting of December 7.

Mr. Herbert F. Schwarz gave a brief survey of some of the more salient episodes in the life history of the Bembecine wasp, *Microbembex monodonta*, as set down by other investigators, and then proceeded to give his own observations of the behavior of this insect on Fire Island. The observations were made at intervals from the middle of August to the early part of September. During this time not a single instance was noted of the stocking of the nests with prey of any kind, and the building operations were of a distinctly haphazard and apparently purposeless character. He was tempted to conclude that this represented perhaps a parallel to that noted in the case of certain other Hymenoptera, *Osmia*, *Megachile*, *Anthidium*, that persist in their tasks even when the egg-laying season has passed and their activities no longer have any significance. The fact was brought out that *Microbembex monodonta* digs a special, shallow burrow in which to spend the night even when it has available a deep commodious tunnel in the construction of which long labor has been expended.

Mr. Bird, under the title "Synonymy," referred to the "no" of the first cave woman as a synonym of "yes," to the good use of synonyms by botanists, and to his own guilty conscience, as preliminary to the synonymy of a Geometrid moth, *Sciagraphia granitata*, with eighteen synonyms, and of a Tachinid fly, *Tachina vulgaris*, redescribed and renamed 257 times. Robineau-Desvoidy established from this one species 247 so-called new species, distributed into five imaginary new genera. As an example of synonymy in ordinary conversation he told of a search for *Sanguisorba canadensis* in "Purgatory Swamp," which was finally located as the "Marsh."

Mr. Taylor gave an interesting account of his "Collecting Experiences in Pennsylvania," covering the results of several years' work near Lewistown Junction, Juniata County. A list of Lepidoptera with notes on such specimens as *Papilio ajax* and other diurnals and eleven species of *Catocala*.

Mr. R. J. Sim, present as a visitor, spoke of experiences in South Jersey, where he said anything was possible. *Lachnosterna luctuosa*, *œmula*, *diffinis*, *Diplotaxis frondicola*, and fifty specimens of *Onothophagus cribricollis*, previously known from single or doubtful records, were among the species seen, as Mr. Sim expressed it, "from the tail of a naturalist's eye," while working on the Japanese beetle.

Mr. Davis showed Dr. Blatchley's new volume on the Heteroptera of Eastern North America, praising highly the results of his five years' study, resulting in keys and descriptions of 1,253 species.

Mr. Davis also showed portrait of Mrs. Slosson to accompany the obituary notice in the JOURNAL and spoke of her varied activities, authorship of twelve books, which in part have already become famous the world over,

china collecting, etc., besides her entomological work in Florida and the White Mountains, resulting in over 100 species and several genera being named in her honor.

He also showed communications from R. J. Hunter and Charles Drury, the latter 79 years old and still finding rare beetles in his garden, where a pile of decaying grass serves as bait.

Mr. Melander contributed to the program, colored drawings of leaf-hoppers from his correspondent, Schild at La Suisa, Costa Rica.

Mr. Lemmer exhibited a box of splendidly prepared moths from Lakehurst, N. J., a part of the result of this year's collecting and each a rarity. The species were as follows: ♂ *Lapara coniferarum*, Wlbe., ♂ *Citheronia sepulchralis*, G. & R., ♂ *Apantesis figurata* Dru., ♂ *Apantesis figurata* form *excelsa* Neum., ♂ & ♀ *Pygarcia abdominalis* Grt., ♂ & ♀ *Graptolitha viridipallens* Grt., ♀ *Graptolitha querquera* Grt., ♀ *Graptolitha nigrescens* Engel., ♂ & ♀ *Graptolitha lepida* Lint., ♂ & ♀ *Graptolitha thaxteri* Grt., ♂ & ♀ *Epiglaea apiata* Grt., ♂ & ♀ *Psectraglaea carnea* Grt., ♀ *Acronycta wanda* Buchh., ♂ & ♀ *Acronycta lanceolaria* Grt., ♂ & ♀ *Papaipema stenoscelsis* Dyar., ♂ & ♀ *Catocala andromedæ* Gn., ♂ & ♀ *Catocala herodias* Stkr., ♂ *Caripeta angustiorata* Wlk., ♂ *Nacophora ypsilon* Forbes, ♂ & ♀ *Stenaspilates zalissaria* Wlk.

MEETING OF DECEMBER 7, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on December 7, 1926, in the American Museum of Natural History; President Frank E. Lutz in the chair, with twenty-four members and nine visitors present.

Dr. Bertha Chapman Cady, 670 Lexington Avenue, New York City, was elected a member of the Society.

Dr. Lutz exhibited for Dr. Mikinosuke Miyajima, of Tokyo, Japan, drawings illustrating his discovery, thus first announced in America, of the control by the firefly, *Luciola picticollis*, of a disease prevalent in Japan. The disease is due to a parasitic worm working in the liver and spleen. The worm being discharged in the faeces, passes its next stage in an amphibious snail. The luminous larva of the firefly attacks the snail, and thus checks the spread of the parasite and the disease it causes.

Dr. Frank L. Campbell read a paper on the "Chemical and Physical Properties of Chitin," reviewing the work of Odier in 1821 and the more recent discussions. He gave as its formula, $C_{32}H_{54}N_4O_{21}$ and as its strongest characteristic, insolubility in alkali. He pointed out that it constituted little more than one fourth the exoskeleton of beetles, and that therefore some of the properties apparently belonging to it and commonly expressed as "heavily chitonized" were due in part to other substances. It appeared to be the same, regardless of its source, and has been identified in such widely separated organisms as Crustacea and mushrooms. He promised

at a future meeting to show the reaction to sulphuric acid and iodine by which its presence is detected.

The paper was discussed by Dr. Lutz, Mr. Weiss, Dr. Stanton, present as a visitor, and by Mr. Johnson, whose question as to the substitution of nitric acid for muriatic acid, in the softening of chitinized material, brought out the relation of chitin to cellulose rather than protein, and the danger of unintentionally making an explosive compound.

Mr. Watson exhibited two boxes containing twenty gorgeous South American butterflies, *Morphos*, etc., a part of a recent gift from Mr. Frank Johnson to the American Museum of Natural History.

Dr. E. A. Chapin, of the U. S. National Museum, spoke of the work in progress there on the Casey collection. Mrs. Casey has provided the cases and the salary of a curator, Mr. Buchanan, who, in two or three years time, will have the whole collection, 75,000 to 125,000 specimens, so transferred that every specimen, from 5,000 to 6,000 of which are types, can be recognized as in the order in which Col. Casey left them, and will always be retained in the separate species trays used in the National Museum. Mrs. Casey has also provided a binocular microscope to aid students, to whom every facility for study will be extended but only in the room in which the collection is housed.

Dr. Chapin spoke with regret of the feebleness of Dr. Schwarz who was retired August 1, 1926, aged 82, after nearly fifty years of service; and of his own studies in *Cleridae*, leading to the opinion expressed in his work on Philippine clerids that the *Korynetinae* should be treated as a subfamily. He also, at the president's request, gave a brief account of the life history of these predaceous insects and their value in checking depredations of forest insects.

Mr. Leng recalled the origin of the name *Necrobia*.

Dr. Cady spoke of the nature study program of the Girl Scouts and exhibited some excellent drawings made by members of her troop. For those who showed the greatest interest, problems in botany and entomology were suggested. Dr. Cady also spoke of the advantage of coordination of the work of different organizations devoted to nature study.

Dr. Lutz, in commenting on Dr. Cady's remarks, spoke of the work accomplished at the Field Station by Mr. Steele and Mr. Creighton, who had been the guests of Mr. Frank Johnson, as an example of such coordination. He also announced the Philadelphia A. A. A. S. meeting at Philadelphia, December 27-31.

Mr. Davis exhibited Essig's "Insects of Western North America."

MEETING OF DECEMBER 21, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., on December 21, 1926; Dr. Frank E. Lutz, President, in the chair, with twenty members and four visitors present.

The program committee reported Messrs. Notman and Nicolay as the speakers for the next meeting.

The president appointed as a nominating committee, Messrs. Barber, Weiss, and Mutehler.

Dr. William Rudolfs read a paper on "Some of the Results Obtained in a Study of the Chemical Changes During the Life Cycle of the Tent Caterpillar," which will be printed in full. It was discussed by Dr. Lutz and Dr. Campbell. The surprising fact disclosed by his analyses was an increase in percentage of fat in the prepupal stage accompanied by a rapid decrease in that stage of the nitrogen percentage.

Dr. Rudolfs also exhibited *Achorutes viaticus*, a springtail found in the filter bed of a sewage disposal plant at Madison, Wis., which, by keeping the stones in the bed clean, saves about \$2,000 a year in cost of upkeep.

Mr. Leng gave some "Remarks on the Forthcoming Supplement to the Catalogue of Beetles," pointing out the rapid increase in the number of names, in the use of trinomial and quadrinomial names, and the numerous changes in nomenclature caused by strict application of its rules.